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Commentary

Tobacco cessation in India: A priority health intervention

While tobacco use is decreasing in many developed countries it is increasing in developing countries such as India. As per the latest nationally representative Global Adult Tobacco Survey (GATS), India had 275 million current tobacco users in the year 2009-2010 (over 35 per cent of adults): majority of them used smokeless tobacco (164 million) and 42 million used both forms of tobacco[1]. An estimated one million people die every year due to tobacco related diseases in India. In order to reduce the impact of tobacco related morbidity and mortality, we need a combination of strategies aimed at avoiding initiation of tobacco by the non-users and cessation of tobacco use among current users. More than half of current tobacco users will die from tobacco related diseases, if they do not quit. If the current use of tobacco among adults is reduced to half by the year 2020, 180 million deaths due to tobacco could be avoided[2]. Tobacco cessation is the only way to save the current tobacco users from tobacco related mortality and morbidity in the short run. Therefore, it is essential to provide tobacco cessation services to the current tobacco users.

Recognizing the importance of tobacco cessation, 13 tobacco cessation clinics (TCCs) were started in 2002 by the Ministry of Health and Family Welfare, Government of India, with the support of the World Health Organization India Country office, and increased subsequently to 19 to provide tobacco cessation interventions. The objectives of these clinics were to evolve cessation strategies for smokers and smokeless tobacco users, to generate experience in tobacco cessation interventions and find out the feasibility of scaling up these intervention strategies. In the first five years, 34,741 tobacco users attended these clinics and baseline information was recorded for 23,320[3]. Only behavioural intervention was provided for 69 per cent of the users and the remaining 31 per cent received both behavioural intervention and pharmacotherapy. At the sixth week follow up, 14 per cent reported to have completely quit tobacco and another 22 per cent reported harm reduction (reducing tobacco use by at least 50 per cent of the baseline use)[3]. Limited number of tobacco users accessing these clinics and very low proportion of tobacco users from rural areas were the major disadvantages of these clinics.

Considering the above limitations of TCCs, a group of researchers conducted a community based group intervention for tobacco cessation in rural areas of Tamil Nadu State to see the impact of such interventions. This study reported a quit rate of 12.5 per cent and harm reduction of 21.7 per cent in the intervention group which was significantly higher than the six per cent quit rate and the nine per cent harm reduction in the control group at two months follow up[4]. Although the group intervention was provided by a doctor in this cluster randomized trial, even in the control group that received only leaflets on the need for tobacco cessation the quit rate was six per cent indicating the potential for cessation even with minimum intervention. If this could be suitably integrated with the primary health care system in India, a substantial number of tobacco users will be able to quit tobacco.

Smoking cessation intervention was reported among patients attending primary health centres in Kerala State. Patients were grouped into minimal intervention and augmented intervention groups. The minimal intervention group received doctor's quit advice and the augmented intervention group received additional brief intervention counselling for smoking cessation by a trained non-doctor health professional. At three months follow up, the quit rates were 16 per cent in the minimal intervention group and 21 per cent in the augmented intervention group[5]. Although this difference was not significant, the quit rates among

both groups were higher than that of the TCCs and the community based group intervention in rural Tamil Nadu. If all the doctors in the health system offer a quit advice to all the tobacco users, a large number of patients are likely to quit tobacco. However, a study among doctors in Kerala reported that most doctors asked about tobacco use only to a minority of their patients[6] indicating the need for encouraging doctors to include tobacco advice in their routine medical practice. As per the GATS India report less than half of the smokers and 27 per cent of smokeless tobacco users were advised to quit by their health care providers[1]. The consultation time can be effectively used by doctors as an opportunity to promote patients to quit tobacco when they are motivated to listen.

The article by Mony *et al*[7] published in this issue on 'tobacco cessation outcomes in a cohort of patients attending a tobacco cessation clinic located within the chest medicine out-patient clinic in Bangalore city, southern India' underscores the importance of tobacco cessation among patients attending different specialty clinics[5]. The authors report five per cent quit rate among these patients at 24 months follow up in the intention-to-treat analysis. This quit rate was higher than the population level quit rate of less than two per cent in India[8]. However, this was much lower than the 50 per cent quit rate reported among chronic obstructive pulmonary disease patients in a developed country[9]. In a recent study from the Kerala State self-reported quit rate among diabetes patients was substantially higher than that was reported in this article[10]. All the patients in this study were given a strong quit advice by the doctor and leaflets on the need for smoking cessation. The intervention group received an additional 30 minutes diabetes specific smoking cessation counselling session by a trained and certified non-doctor health professional. At six month follow up, the quit rate of 51.8 per cent in the intervention group was significantly higher than the 12.5 per cent in the control group. At one year follow up the quit rate in the intervention group remained high at 45.8 per cent compared to the 19.8 per cent in the control group[11].

Tuberculosis (TB) is another disease which is linked to even small amounts of tobacco smoking[8]. In Kerala, smoking rate among TB patients was reported to be two times higher than the general population and the need for TB specific tobacco cessation counselling to these patients was highlighted earlier[12]. It was also suggested to provide tobacco cessation advice at each stage of TB treatment in order to avoid relapse. The possibility of shifting from smoking to smokeless tobacco use by TB patients has also been reported from India[13] which needs to be addressed in tobacco cessation programme for these patients.

The unassisted smoking cessation in India is very low unlike in the West[14]. In India, tobacco users quit after they get some diseases. Therefore, it is all the more important that doctors and other health professionals address tobacco as a serious risk to public health. Tobacco cessation in general population is usually preceded by tobacco cessation among health professionals. The Quit Tobacco International (QTI) supported by the Fogarty International Centre of the United States National Institutes of Health has embarked on a project incorporating tobacco cessation intervention in the undergraduate medical curriculum in two countries: India and Indonesia. The major objective of this project is to build capacity for tobacco cessation among medical students so that the future doctors will have the skills to offer tobacco cessation to their patients using the five 'A's (Ask, Advise, Assess, Assist, Arrange) and the five 'R's (Relevance, Risks, Rewards, Roadblocks, Repetition). As part of this project in India, 15 course modules were developed, piloted, implemented and evaluated in various departments of five medical colleges in Kerala and Karnataka States. The list of the modules and the details are available in the QTI website[15]. Each module consists of five components: a set of mini lectures with speaker notes, clinical case scenario, fact sheet, instructor resources and sample questions for examinations. In addition, 14 short clinical videos of five to eight minutes duration were also developed and uploaded on the website. All these resources could be utilized for teaching medical students within the available flexible curriculum not only in India and Indonesia but in other parts of the world.

Tobacco cessation needs to go beyond the health sector. The recent successful quit tobacco intervention carried out by teachers in the Indian State of Bihar is an excellent example of tobacco cessation intervention outside the health sector. The intervention comprised educational efforts, tobacco control policies and cessation support. Among teachers in the intervention group the quit rate of 20 per cent was significantly higher compared to the five per cent in the control group[16].

Tobacco cessation in India needs to be implemented in multiple settings. Incorporating tobacco cessation training in medical and other health professional

education, training of health professionals to offer cessation advice in their routine health care practice, disease specific counselling sessions in diabetes, TB and selected other specialties are likely to result in significant quit rates among current tobacco users. Effective implementation of the Framework Convention of Tobacco Control is likely to have impact not only on the prevention of initiation of tobacco use but also on tobacco cessation to a large extent.

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